

### ABSTRACT

A network for altering the audio output of a system which comprises at least one series RC or RLC circuit coupled between the positive and ground conductor of a cable that is suitable for connecting an electrical musical instrument, or similar source, to an amplifier or other load. The components of the RC or RLC circuit are selected by determining the frequency at which the positive conductor's natural phase angle is  $45^\circ$ . Each of the RC or RLC circuits is selected to have a phase angle of  $-45^\circ$  at a frequency equal to or different from the frequency at which the positive conductor has a phase angle of  $45^\circ$  depending upon the audio effect desired. In addition, the component values of the circuits are selected such that the measured impedance of the network at all frequencies in a predetermined frequency range is equal to or greater than  $.20\text{ M}\Omega$ , and the overall combined capacitance of the cable and the capacitance and/or inductance of the network does not cause the effect of audible "roll-off" in the system.